

Perrygo & Lingebach,

Tennessee, April,

May, June to July 15, 1937

# RECORD

Perrygo & C. Hingebach

Apr. 3, 1937

Left Washington D. C. about 11<sup>30</sup> A.M. Saturday by Museum truck headed for Memphis Tennessee to collect birds, mammals & reptiles for U.S. Natl. Museum. Went by way of Waynton Va where we had lunch & then proceeded to New Market Va. and then to Salem Va via the Lee Highway where we put up in the Carter Tourist Home for the night.

Sunday.

April 4, 1937.

Left Carter's Tourist Home about 8:30 A.M.  
 on Route 11 to Bristol Va & Tennessee then  
 took Route 11W to Knoxville From  
 Knoxville we took Route 70 to Rockwood  
 where we stayed in a Tourist Home for the  
 night.

April 5, 1937.

Left Rockwood on Route 70 for Nashville  
 through Murfreesboro In Nashville we stayed  
 at the Andrew Jackson Hotel near Court House  
 We arrived late & State House was closed and  
 we did not know Mr Buntin's home address.

April 6

Went to State house to see Mr. Buntin but he was in the vicinity of Memphis & his secretary did not know where he could be found. We went to the State Museum to look over their collection. We found that the birds in the collection both skins & ~~no~~ mounted birds were poorly labeled. we spent some time changing & putting the right labels on the specimens. Much to our surprise we found a large type flying squirrel but it had no label. As near as we could find out they came from around the Smoky mountains. We then left for Memphis. But it was too late so we stopped in Jackson. Route 70.

April 7

Left Jackson for Memphis. By Route 70. arrived in Memphis about 1:00 P.M. Looked around town & went to Museum. It is called The Pink Palace in East Memphis. The specimens here were better mounted & exhibited. The specimens of which many were mounted in Memphis. The labels were proper & eligible. One hall contained many mounted North Amer. Game birds. This Museum was much better than the one in Nashville. We left here & found a suitable place to stay in Clondale. at the Greenacres Tourist Camp. By the time we got straightened straightened around & organized it was too late to set out to collect.

April 8

We left camp to look for some collecting grounds. We found a small place near Trager in Shelby County - where we collected some birds but country was cut up into small farms & made it bad for collecting.

April 9.

We left camp today by route 64 & went to a Cypress swamp that had been drained near Hickory Withe where we collected some birds. This place looked better for trapping. After we collected we found that the land belonged to Mr. A. Weber of Hickory Withe. After talking with him he gave us full swing of his place. about 10 miles long & 2 miles wide. This was ideal for our purpose.

April 10.

We returned to Hickory Withe where we  
set traps + collected.

April 11.

Returned to Hickory Withe.

April 12  
Hickory Withe.

April 13.  
Hickory Withe.

April 14  
Hickory Withe 3 miles West.

April 15.  
Hickory Withe 3 miles West.

April 16.  
Perrygo Withe. 4 miles West.

April 17.  
Perrygo left Lingback at Ellendale to collect in hope of finding something different as the swamp was getting collected out. + this collecting was done near cotton fields + in underbrush.

Sunday.

April 18

Ran traps at Hickory Withe.

April 19.

Lingebach collected at Bartlett & Perrygo went to Hickory Withe to run traps & collect what he could. Mrs Perrygo join us in camp today.

April 20.

Perrygo went to Hickory Withe & put  
Lingebach off at Eads to collect in hard wood.  
trees on highway 64.

April 21.

Perrygo went to Hickory Withe & Lingebach  
collected at Ellendale.

April 22, 1937.

Perrygo went to Hickory Witho to get traps  
+ Lindeback started to pack things to  
leave but when he returned it was too late  
to start for Area #2.

April 23, 1937.

Packed truck + proceeded to #2 area.  
by Route 70 to Mason + Route 59  
to Covington. Then Route 51 to Sigersburg  
then 51 to Union City we tried to make  
headquarters at Abion, the center of the area  
but with out success as there were no  
tourist camps around Abion. We find one  
3 miles from Union City.

April 24.

We left camp to look over collecting grounds & took a trip to Reelfoot. The all of this country is pretty well built up into small farms. but it looks fairly good to collect in. We asked permission to Chapin Lake & we will get our answer Monday & it will be a favorable one from the way Mr Rogers spoke.

On the way back we stopped in Abion County and collected a few birds.

April 25.

April 26, 1937

We left camp for Reelfoot Lake. We went to see Mr. Raines and got permission to collect on his property in Obion County. Left Lingeback in Obion County to collect. Perrygo continued on to Reelfoot Lake where he visited B. C. C. Camp & obtained <sup>written</sup> permission to set traps and shoot on & around Reelfoot Lake. Perrygo set traps near the lake. Then continued on to Obion County where he set traps in hardwood swamp for mice and squirrels.

At Reelfoot Lake Perrygo collected two birds. Returned to cabin. Made up birds both collected.

April 27.

Collected in Obion County and ran trap line in Obion and Lake Counties. Set more traps in Lake County. Drove several miles looking for collecting grounds in Liptonville & Phillippey, but the farms are cultivated to the highway.

April 28, 1937

Left Lingebach off in hardwood swamp in Ohio Co. Perrygo ran trap line there then went on to Lake Co. to run trap line there.

Returned & joined Lingebach. went to Hornbeak and followed a country road three miles east of Hornbeak.

April 29, 1937

Collected & ran trap line in and near Reelfoot Lake. To-morrow we will try the higher bluffs above Reelfoot Lake.

April 30, 1937

Ran trap line in Lake Co. Took traps up in Hardwood swamp because of heavy rain of the night before which flooded the swamp, hurrying most of the traps so that could not be found. Perrygo & Lingbach collected in this county ~~collect~~ taking a dozen birds.

Returned & made up specimens

May 1, 1937

Collected birds four miles West of Hornbeak. Perrygo ran trap line & started to set more traps when settled rain started so didn't set any more.

May 2, 1937

Perrygo met Dr. Friedman at Union City R. R. Station 12:05 C.S.T. Lingibach skinned & made up fox squirrel caught Saturday.

After dinner Dr. Friedman, Perrygo and wife went to Union City P. O. to mail Dr. Friedman's letters. Then went on route 51 to Fulton, Kentucky looking for collecting ground.

May 3, 1937

We left camp and went to Hornbeak where we left Lingebach to collect in hills there. We continued on to Reelfoot Lake where Perrygo ran trap line & took them up. Dr. Friedman tried to collect at Reelfoot lake. Perrygo left him off at Reelfoot, Ohio Co. in swamp & he, Perrygo continued on to an area near Hornbeak to collect. Returned, set two trap lines at Lacater's corner, west of Hornbeak. Picked up Dr. Friedman & Lingebach. Returned & made up birds & mammals.

May 4, 1937

It was a very pretty day today. We left camp for Hornbeak where we left Lingelbach & Dr. Friedman on a country road four miles west of Hornbeak.

Perrygo continued on to Lasater's corner where he ran the trap line. He then went out a dirt road S. W. of Hornbeak to Ridgely, Liptonville & Reelfoot Lake. Then he set a new trap line in Samburg. We continued on to Hornbeak picked up Lingelbach & Dr. Friedman & returned to camp to prepare specimens.

May 5, 1937

Ran trap lines in rain. Returned early to take Dr. Friedman to doctor. Left Union City at three o'clock and took Dr. Friedman to Memphis where we ate dinner and took Dr. to station where he ~~took~~ the train back to Washington. Returned to Union City arriving at 12:30.

May 6, 1937

Ran the trap lines & then continued on the Samburg road for five or six miles trying to collect specimens needed. We went on to Reelfoot Lake to get turtles where we obtained two. Returned & made up birds & mammals.

May 7, 1937

To-day was a pretty day. We ran two trap lines & took up traps. We then went to Reelfoot Lake to see about getting turtles. We hired a boat and went out on the lake, stopping at Green & Caney Islands to collect. These Islands are mostly under water. Caney Islands is a little dry in places where there are mounds. The deer and other animals left when the lake froze over two winters ago. There are still squirrels & rabbits on the Islands.

We returned & made up specimens.

May 8, 1937

To-day was a beautiful day Lingbach packed the birds for shipping Perrygo went to Reelfoot Lake and got turtles for Dr. Stejneger. He took up traps for muskrats, returned and helped Lingbach pack the camp things. He went to Union City for mail and groceries and shipped the specimens & turtles.

May 9

To-day was a partly cloudy day. He arose, had breakfast, cleaned the truck & packed the remainder of the equipment. Left Union City on Route 454 to Jackson and then to Selmer where we took route 15 to Waynesboro. He went through Waynesboro for a distance of five miles out so trying to find a Tourist Camp. The camp back and are located at Windland Camp

This area doesn't look very promising for birds, etc. All the timber has been cut down & the woodland is made up of small trees & some of this has been burned.

May 10, 1937

We left camp and went thirteen miles out a dirt road north of Waynesboro. About ten miles north, we stopped and collected birds up and down the hills.

We returned to camp and made up specimens.

We visited & went up in the fire tower on Flat Top where we saw nothing but timber land for miles around.

May 11, 1937

Left camp and drove out a gravel highway to nine miles north of Waynesboro. Here we separated and collected on both sides of the highway at an altitude of 850'.

Returned to Waynesboro, stopped for groceries & came back to camp & ate lunch. Made up specimens.

May 12, 1937

Collected 10 miles north of Waynesboro  
Returned & made up specimens.

May 13, 1937

Went out route 13 and went back  
down a dirt road into valley about  
five miles looking for large timber, but  
it had all been logged out. So we  
came back and collected about 8 mi. N.  
It was very wet from the storms of  
two days.

Returned & made up specimens.

May 14, 1937

Went out route 13 about 8 miles.  
Set all the traps & collected. On the  
way back the truck stopped and  
we had to go to a garage & have a man  
fix it, after we had tried for some time.  
Returned about four o'clock, ate dinner.  
made up specimens

May 15, 1937

To-day was a cool pretty day. Perrygo  
ran trap line, setting more traps as he  
did so. In the meantime, Lingbach  
collected in the same area as the  
previous day.

Returned and made up birds  
and mammals.

May 16, 1937

Ran trap line. Returned, had dinner.  
Went to Natural Bridge & Lawrenceburg.

May 17, 1937

Perrygo left Lingebach off at Buffalo River, Flatwood, Tenn. Then Perrygo ran trap line. Came back toward Waynesboro and went down a dirt road to north east about five miles to Green River to collect. Went back to Buffalo R., picked up Lingebach. Returned & made up specimens.

May 18, 1937

Ran trap line. Collected about five miles north on Green River.

Returned & made up specimens

May 19, 1937

Ran trap line & collected 8 mi. N. near the trap line. Went to Buffalo River to collect. Returned & Lingback made up birds while Perrygo took the truck to have it greased. Prepared part of equipment to leave to-morrow.

May 20, 1937

Left Haynesboro for Crossville. Stopped off at Nashville, saw Mr. Buntin and went to museum. Ate dinner and continued on to Crossville arriving there after dark at Tourist camp about five miles out of Crossville.

May 21, 1937

Went to Crossville and took road south. Stopped at CCC camp to get location of good collecting grounds as the majority of the land in this area is government owned. Mr. Rowland directed us to Falls Creek in Van Buren County where he thought it would be the best collecting.

We visited the Falls which were very beautiful falling 300 ft into a canyon in the mountains, but there was a scarcity of birds. The grounds were posted as a game preserve. On the way back we stopped off at Pikeville to get a bite to eat, but it made us all sick before ~~we~~<sup>we</sup> reached home.

May 22, 1937

All sick in bed

May 23, 1937

Recuperating slowly.

May 24, 1937

Visited the C.C.C. Camp again and secured another locality for collecting, which was about seven miles S.W. of Crossville in Cumberland Co. on Byrd Creek. Here we set a trap line and collected returning about noon. Made up specimens.

All still feeling weak, but improving slowly.

May 25, 1937

Visited the C.C.C. Camp again to secure written permission to collect in the Cumberland Homesteads Park area. Collected in this area 7 mi. S.W. of Crossville.

May 26, 1937

Ran trap line and collected  
seven miles S.W. of Crossville along  
Byrd Creek.

May 27, 1937

Ran trap line and collected around  
Byrd Creek, seven miles S.W. of Crossville.

May 28, 1937

Left Lingeback off about four miles south of Crossville and he worked his way east, covering Byrds Creek from west to east.

Perrygo ran trap line taking up most of traps. Continued on about five miles, setting small traps for mice or shrew. Then went on toward Pikeville about 1 mile east of it, setting traps along hedge row for meadow mice.

May 29, 1937  
Sat.

Lingeback collected 5 Mi. E. of Crossville on Byrds Creek.

Perrygo ran trap lines at Melvin and Pikeville. Collected in both places. Secured permission from farmers at Pikeville to take field birds in this vicinity.

May 30, 1937

Sunday

To-day was an extremely hot day.  
 We cleaned the truck inside and  
 out, cleaned cabin and put birds  
 out to dry.

May 31, 1937

Collected field birds on Mr. Stephens' farm, 2 miles north of Pikeville. Looked up traps here and at Melrose. Ate dinner at Stephens' home. Returned made up specimens & packed birds, etc. preparing to leave for Shady in the morning.

June 1, 1937

Left Crossville on route 70 for Shady Valley, Tennessee. Stopped at Rogersville for dinner and then continued on through Bristol and then to Shady Valley, arriving at dusk. Pitched our tent behind the P.O. here, wrote letters, ate supper.

June 2, 1937

Went over Holston mountains stopping at an altitude of 3300 ft. to collect in Sullivan County. These mountains are very steep and rocky + there don't seem to be many birds on the west side. It started to rain hard so returned to camp about 1 o'clock and ate lunch. Made up specimens, etc.

June 3, 1937

Drove about twelve miles northeast of camp in Shady Valley collecting ~~at~~ most of birds  $6\frac{1}{2}$  mi. from camp. Visited Backbone Rock in Cherokee National Forest.

June 4, 1937

Collected on Appalachian trail about four miles N. E. of camp in Shady Valley on the Holston Mts. at an altitude of 3800 ft. There seemed to be quite a few birds in this area. On the way up the mountain we found a place which we think will prove fruitful for mammals. There were many chipmunks here.

Returned & made up specimens. A thunder shower came as soon as we started to make up specimens.

June 5, 1937

Lingbach collected in Shady Valley near the camp while Perrygo went into Bristol on business. Soon after lunch Dr. Wetmore arrived. Made up specimens after helping Dr. Wetmore pitch his tent. It had a heavy thunderstorm that evening.

June 6, 1937  
Sunday

~~After dinner~~

After breakfast Dr. Wetmore and Perrygo went up on Iron Mt. returning about 12:30 for dinner. After dinner Dr. Wetmore & Perrygo made up specimens taken in the morning. In the evening all went back of camp in the Swamp looking it over as collecting grounds. Took two birds. Returned & made them up.

June 7, 1937

After breakfast all went in Dr. Wetmore's car as far as Carter, Tennessee where we stopped to collect from there on back to Shady Valley in various places. Returned about 11:30 and went collecting behind camp in the swamp. Had dinner and made up specimens.

Had a little rain as it does every afternoon.

June 8, 1937

After breakfast we helped Dr. Wetmore pack and leave for Natural Bridge, Va. Lingebach collected on Holston Mts at an altitude of 3800 ft. and east as far as Crandall. Perrygo set traps on Holston Mt. <sup>from</sup> an altitude of 3000 ft to 3800 ft. and collected at same places.

Returned & made up specimens.

June 9, 1937

Perrygo ran trap line on Holston Mts.  
Lingebach & Perrygo collected birds in  
same locality.

June 10, 1937

Lingebach collected in swamp  
in back of camp in Shady Valley.  
Perrygo set some more traps on Holston  
Mts altitude of 3800 ft., also ran trap line  
at the base and at top of Holston Mts.

Returned in terrific thunderstorm  
and hail. Wind blew hard all evening  
making it difficult to make up specimens.

June 11, 1937

Lingbach collected in Shady Valley at an altitude of 2900 ft. Perrygo ran trap line on Holston Mts. from 3000 ft. to 3800 ft. Collected five miles north of Shady Valley Camp on road to Damascus, Va.

June 12, 1937

Sat.

Lingbach collected in Shady Valley. Perrygo ran trap lines on Holston Mts.

Sun.

June 13, 1937

Perrygo ran trap line in the morning, returned and made up specimens. At noon we went on a picnic with Mr. Blevins and family, on whose place we stay. We went up on Iron Mt. to an altitude of 4000 ft. to visit the tomb of an old man who had lived alone for forty years in this one place.

June 14, 1937

Lingbach collected in Shady Valley. Perrygo ran trap line on Holston Mts. & set a new trap line in swamp behind the camp in Shady Valley.

June 15, 1937

Perrygo & Lingbach took up traps in Holston Mts. Went five miles north on road to Damascus, Va. to collect. Retterach & Lingbach made up mammals of Holston Mts. while Perrygo ran trap line in swamp in Shady Valley. Made up these specimens.

June 16, 1937

Ran & took up traps in swamp in Shady Valley. Made up specimens. Packed birds & mammals. Prepared to leave to-morrow.

June 17, 1937

Left after breakfast for Gatlinburg, Tenn. We arrived in Gatlinburg about four o'clock in the afternoon. We went to the Park Service Office & met Mr. Stupka and Mr. Eakins who gave us the necessary permission to collect here in the Smokies. Mr. Stupka took us to his office and showed us specimens which the Park Service had. He also got us situated for the night in a Tourist Camp and suggested the best places to eat and buy groceries. He told us to stay overnight and he would send one of Park Service boys with us to Cosby C. C. Camp. There we were met the next morning by Mr. Ownby, Fire Guard at the Camp who showed us the deserted house near the camp where we were to stay.

Mr. Ownby & Mr. Schultz of the Park Service stayed with us until noon helping us to fix the house & cut grass, etc. Mr. Schultz stayed to lunch and showed us the way to Newport where we went to secure supplies, etc.

June 18, 1937

Went up trail from camp to Low Gap and on around Cosby Knob about 3 miles on the Guyot Trail. We collected up and back returning late in the afternoon. On the way back killed a timber rattler with nine rattlers on the tail.

Sun.

June 20, 1937

Made up specimens from Saturday.

June 21, 1937

Lingbach & Perrygo went up to Mt. Lupton & Old Black Mt. & collected. Returned about 6:30 P.M. Cleaned up some of the birds. The midges were so bad we had to leave the birds for the next day.

June 22, 1937

Made up specimens taken on Mt. Guyot June 21. Mr. Stupka came up and brought an artist, Mr. Chaffin to sketch mammals & work along with us. He ~~made~~ secured a place in C.C. camp in Officer's Quarters to stay.

June 23, 1937

Perrygo & Mr. Chaffin went up on Mt. Guyot to set traps for mammals.

Lingebach went to Decaport for groceries. Returned & collected in low altitudes near camp.

In the later afternoon while making up specimens Lingebach was visited by Mr. Ownby, Park Fire Guard, Mr. Stupka and a young chap who was to do some taxidermy work, being with us during the day assisting & learning at the same time. He is to stay with Mr. Chaffin at the C.C. Camp.

June 24, 1937

Perrygo, Lingbach, Chaffin & Cady went up on Mt. Guyot ran trap line and collected 3700 to 6600 ft. Made up mammals & skinned some of the birds. Retired at midnight.

June 25, 1937

Perrygo went to Newport on business. Came back and made up birds from yesterday. Lingbach and Cady went up on Mt. Guyot to run trap line and collect.

June 26, 1937

Collected on Mt. Guyot & Indian  
Knob. Made up specimens from the  
25th. & made up mammals from today.

Ran trap line on Mt. Guyot and  
changed some of the traps

Sun.

June 27, 1937

Rained all day. Perrygo ran  
trap line ~~road~~ on Mt. Guyot.  
Langbach made up specimens  
collected on 26th.

June 28, 1937

Lingebach ran trap line and collected  
on Int. Guyot. Perrygo went to Cosby to  
get supplies & collected near Cosby.

June 29, 1937

Perrygo ran trap line and  
collected on Int. Guyot. Lingebach  
collected near camp.

June 30. 1937

Perrygo ran trap line and collected on Mt. Guyot. Look up traps on Mt. Guyot and moved them down to Indian Knob. Lingbach set traps on Low Gap Trail and collected on + near it.

July 1. 1937

Perrygo ran trap line and collected on Indian Knob, Snake Den Mt. Lingbach went to White Rock collecting up + back.

July 2, 1937

Perrygo took up trap line on Indian  
 trail & brought them down to Snake  
 den Mt. at an altitude of 3800 ft.  
 Collected from Indian trail to bottom  
 of Snake den Mt. Lingelbach collected  
 near camp for the birds needed from  
 low altitude.

July 3, 1937

Perrygo & Lingelbach ran trap lines  
 and collected on & below Snake den Mt.

Sun.

July 4, 1937

Rained all day. Planned to go to Gatlinburg & Klingman's Dome but stayed home because of rain. Perrygo ran trap line near camp, he & Lingbach ran trap line on Lost Gap trail. Perrygo ran trap line & took up traps below Snake Den Mt. Packed birds, made up a mouse caught in house last night.

July 5, 1937

Went to Newport to ship specimens then on to Gatlinburg where we visited Mr. Stupka, Park Naturalist. He went up to Klingman's Dome. Returned to Gatlinburg and had lunch with Mr. & Mrs. Stupka. Returned to Cosby & packed to leave the next morning.

July 6, 1937

Left for Cleveland, Tenn. stopping at Newport to ship specimens. Took highway out of Newport to Knoxville. Took Route 11 out of Knoxville to Cleveland, Tenn. arriving about 4:30 P.M. Here we secured the proper permits from Mr. Cooper of the Park Forest Service to collect + have camp fire in the National Forest at Ocoee. They gave us the directions to the place we were to camp. Being late, we stayed in Cleveland over night, leaving the next morning for Ocoee. We arrived at our destination in the afternoon and pitched our tents just in time before it rained.

Mr. Smith, acting game warden joined us to see if he could be of any assistance.

July 8, 1937

Mr. Smith came after breakfast and went with us to the C.B.C. Camp where we were to receive our mail. We surveyed the surrounding ~~area~~ territory for suitable collecting places. Returned and finished fixing the camp and set out a trap line.

July 9, 1937

Ran trap line.

We collected  $8\frac{1}{2}$  miles S. of Copperhill Tenn. on Big Frog Mt. Returned about noon in a down-pour of rain. It rained the remainder of the day. We made up all the specimens taken in the morning.

In the late afternoon we were visited by Mr. Foster, Superintendent of Forest Service. Later Mr. Smith came over and brought us a cot as we only had two.

July 10, 1937

Ran trap line.

We drove about eight miles to an altitude of 2000 ft. We then hiked by trail about seven miles to the top of Big Frog Mt. to an altitude of 4150 ft. We collected on the way up, on Big Frog Mt. and on the way back getting a nice lot of birds.

The weather was unusually hot until we had a heavy thunder-storm.

Made up specimens including a ground-hog.

Sun.

July 11, 1937

To-day was very warm until late afternoon when ~~the~~ had a heavy thunderstorm which cooled things off.

Ran trap line before breakfast. Fixed tire & ~~also~~ ~~end~~ around camp.

July 12, 1937

Perrygo went to Cleveland for groceries, etc. Lungebach collected at an altitude of 1800 ft. near camp. Perrygo set new trap line on Big Troy Mt. Made up specimens.

Ran trap line before breakfast

July ~~12~~ 13, 1937

Ran trap line at camp and trap line on Big Frog Mt. Collected on Big Frog Mt. while running trap line.

We went on Beans Mt. which is <sup>an</sup> arid pine mt. and reached an altitude of 3023 ft. Rattlesnakes are very common. We took one alive. We found birds to be very scarce. There is a good C.C. road leading to it affording a beautiful view of the adjoining valleys.

Returned in the late afternoon. Later made up specimens.

July 14, 1937

Ran trap line near camp and on Big Frog Mt. Collected on Big Frog & Beans Mts. Returned in afternoon and made up specimens. Received letter from Dr. Wetmore to return to Washington so cleaned out truck, etc. preparing to leave July 15 in the evening for Cleveland, Tenn.

July 15, 1937

Perrygo & Lingback collected on Big  
Hog Mt. made up specimens. Broke  
camp and left for Cleveland in the  
late afternoon. Stopped at CBB camp  
for mail, etc. Arrived in Cleveland and  
went to Forest Service. Went on to  
Knoxville where we ate supper & stayed  
overnight.

July 16

Ate breakfast and started on  
Route 11 to Bristol, Va. where we ate  
lunch. Continued on the same route  
to Roanoke where we stopped for  
truck repairs. Continued on to Fair-  
field, Va. where we stayed overnight.

July 17

Ate breakfast and then continued on the same route to Fairfax where we stopped for lunch. Arrived in Washington about 2 o'clock in the afternoon.

June 22 - Linc. 70

23. - Grov = 5 gal. gas. + 2 gal. f. 46  
3.52 1.25